

Notice of Allowability

Application No.

10/698,809

Examiner

Haissa Philogene

Applicant(s)

PERON, BENOIT

Art Unit

2828

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to application filed 10/31/03.
2. ☒ The allowed claim(s) is/are 1-32.
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☒ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 10/31/03
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☒ Other attached paper.

Haissa Philogene

Primary Examiner

Haissa Philogene

DETAILED ACTION

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

The application has been amended as follows:

In claim 1,

- line 1, "the" before "voltage" has been changed to –a–;
- line 2, "the" before "current" has been changed to –a–

In the Drawings, Figures 1 and 2A-2D have been labeled as –PRIOR ART–.

Allowable Subject Matter

The following is an examiner's statement of reasons for allowance: The prior art fails to disclose a circuit for controlling two switches bidirectional for [the] a voltage and unidirectional for [the] a current, assembled in anti-parallel, comprising, in series between two terminals of the anti-parallel assembly, two identical control stages respectively dedicated to each switch and between which is interposed a common impedance setting a phase angle for the turning-on of the switches, each stage comprising: a controllable current source for providing a current to a control electrode of the concerned switch; a capacitor for storing a supply voltage of at least the current source; an element of activation/deactivation of the current source according to the voltage across the stage capacitor; and an assembly for discharging the capacitor

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during the operation of the other stage (claim 1); a power-reducing circuit having, inter alia, a first switch coupled to a load node and to a supply node; a second switch coupled to the load node and the supply node; a first control stage coupled to the load node and operable to close the first switch during a portion of the positive half period of the supply signal; and a second control stage serially coupled between the first control stage and the supply node and operable to close the second switch during a portion of the negative half period of the supply signal (claims 16 and 22); a method comprising: driving a load with a time-varying signal; charging a capacitor with a first current that flows through a load during a first portion of the signal; causing a second current to flow through the load when a voltage across the capacitor exceeds a predetermined voltage; and prohibiting the second current from flowing through the load when the voltage across the capacitor decays to approximately a second predetermined voltage or when the first current decays to approximately a predetermined current (claims 24 and 31). The remaining claims 2-15, 17-21, 23, 25-30 and 32 are allowed by virtue of their dependencies on the independent claims. Hence, the examiner has allowed claims 1 through 32.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Widmayer et al., Patent No. 4,933,798 ; Raonic et al., Patent No. 5,796,599.

None of the above patents discloses the power reducing system as recited.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Haissa Philogene whose telephone number is (571) 272-1827. The examiner can normally be reached on 6:30 A.M.-6:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MinSun Harvey can be reached on (571) 272-1835. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

hp

Haissa Philogene
Primary Examiner
Haissa Philogene